

Subcommittee Investigates Barriers to Women Seeking Science and Engineering Faculty Positions (October 17, 2007)

Washington, D.C. - Although women are increasingly earning degrees in science and engineering, they are significantly underrepresented at the faculty level in almost all science and engineering fields. Today, Members of the Science & Technology Committee's Research and Science Education Subcommittee examined institutional and cultural barriers that exist for women seeking science and engineering faculty positions at U.S. colleges and universities.

"Women are increasingly obtaining advanced degrees in math, science and engineering, yet many face obstacles when looking to advance their careers or obtain faculty positions at our country's colleges and universities," said Chairman Baird. "It is critical at this time, when our country is looking for ways to maintain its competitiveness, that all scientists and engineers have a seat at the table at our academic institutions."

Witnesses at the hearing included: Dr. Donna Shalala, President, University of Miami; Dr. Kathie Olsen, Deputy Director, National Science Foundation; Dr. Freeman Hrabowski, President, University of Maryland, Baltimore County; Dr. Myron Campbell, Chair of Physics, University of Michigan; and Dr. Gretchen Ritter, Professor of Government, University of Texas at Austin.

According to data compiled by National Science Foundation (NSF), in 2003, women held only 28 percent of all full-time science and engineering faculty positions. Specifically, they constituted 18 percent of full professors, 31 percent of associate professors and 40 percent of assistant professors.

"Today's hearing provided subcommittee members with a unique opportunity to interact directly with Dr. Shalala and other experts to better understand why women continue to be under-represented in careers in the physical sciences. Federal policy makers must be more proactive in stopping the leaky pipeline that results in women departing at every major transition point while pursuing careers in engineering, physics, technology and related fields," added Rep. Eddie Bernice Johnson (D-TX) in a statement.

In 2006, the National Academies produced a report entitled, "Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering," which concluded that there is a need to fix institutional, social and cultural bias and barriers. They recommended that colleges and universities provide clear leadership in changing the culture and structure of their institutions to recruit, retain and promote women into faculty and leadership positions. They also recommended that the federal government vigorously enforce current federal anti-discrimination laws and coordinate workshops to minimize gender bias in academic science and engineering.

The National Academies panel also argues that changes in institutional policies are necessary but not sufficient even many policies that appear on the surface to be equitable in fact disadvantage women. For example, many women who want children struggle with the intersection of the tenure clock and their biological clock. In order to attract top faculty candidates (men and women) who want both career and family, most universities now offer the possibility of an extension of the time to tenure. But in most cases young faculty feel pressure not to request this extension for fear that they will be judged differently in the tenure review process. In this case, cultural norms undermine a well-intentioned policy and

disproportionately disadvantage women who remain the primary caregivers for young children.

“Overcoming these cultural barriers is much more difficult than just enforcing anti-discrimination laws or making university policies more family friendly,” continued Baird. “This is one in a series of hearings examining how we can break down barriers and increase opportunities for women seeking careers in math, science and engineering fields.”

Chairman Baird noted that NSF has played an important role in increasing the representation of and advancement of women in academic science and engineering careers. In particular, the ADVANCE grant program aims to tackle the institutional and cultural barriers to all women in science and engineering. These grants have enabled institutions to experiment with innovative recruitment and retention policies, as well as targeted mentoring, workshops, and other activities to raise awareness among departmental chairs and faculty about the existence of real barriers to women scientists and engineers.

For more information on this hearing, please visit the Committee’s website at <http://science.house.gov/>.

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